(Design Document)

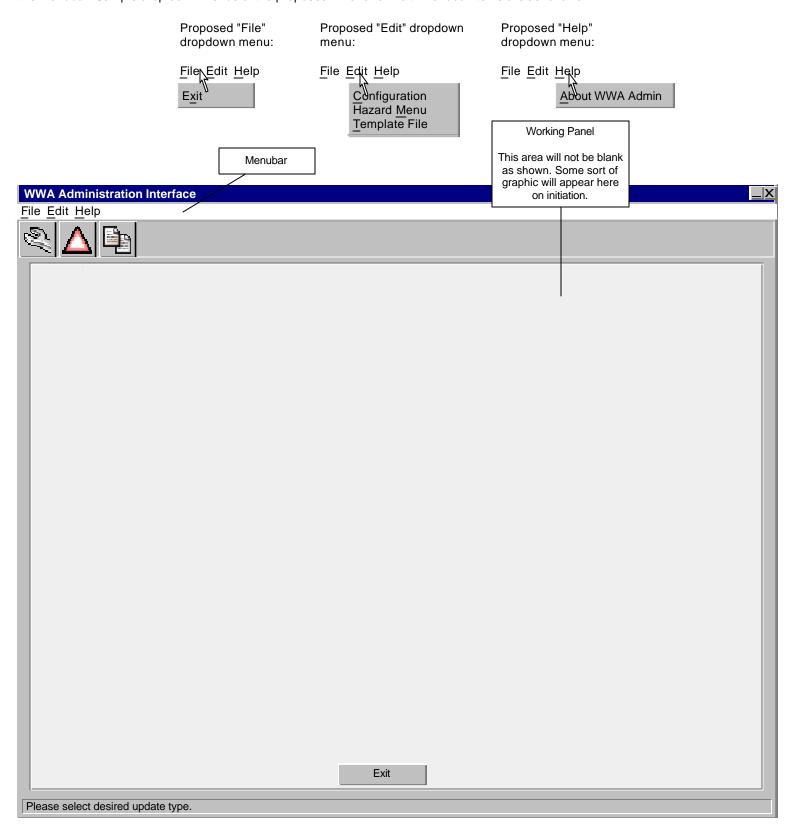
Cecelia A. Mitchell
RS Information Systems
National Oceanic and Atmospheric Administration
National Weather Service
Meteorological Development Laboratory

October 24, 2002

NOTE: The interface examples illustrated herein are conceptual and therfore final aesthetics may appear slightly different.

The WWA Administration Interface (WWA Admin) application will be started by a binary (and very likely a script) that only the ifps user will have executable permission of. The plan is that its execution will be started from the drop down menu of the workstation desktop. When the application is started, the initial WWA Admin window will appear as illustrated below. This will be the main display (also referred to as window) for all of the WWA Admin updates. Every state of this window will have a button named "Exit" near the bottom that will be used to exit the application. The "Exit" menu item of the "File" menu will also be used to exit that application.

Notice the Working Panel. It will be the dynamic part of the display that changes based on the type of update that the user selects. Notice the Menubar. Sample drop down menus of the proposed "File" and "Edit" menubar items are as follows:

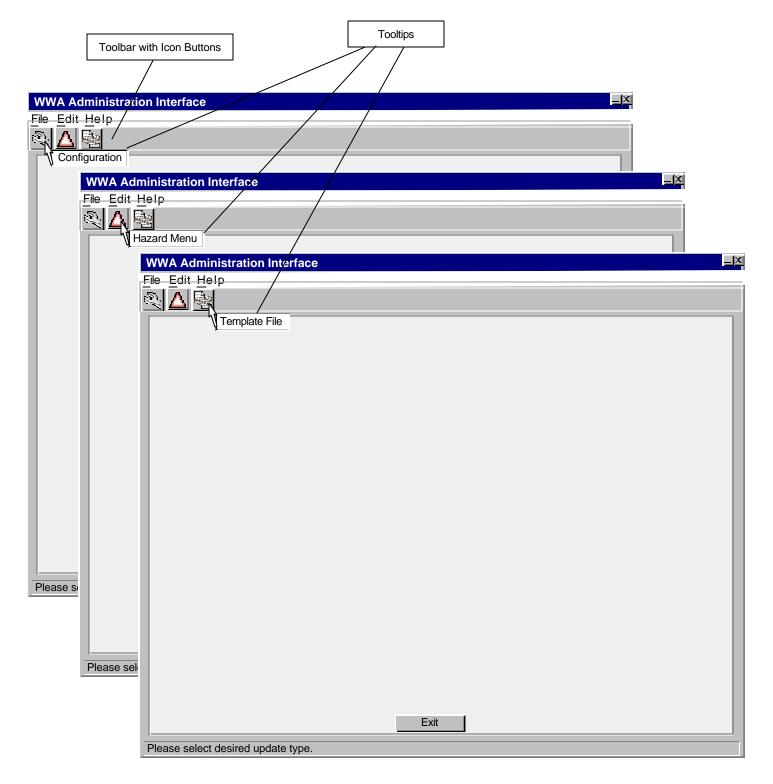


User will need to select one of the three toolbar update icon buttons or an "Edit" menu item. These will bring up the panels associated with each of three possible areas of administration (types of edits):

Configuration, Hazard Menu or Template File.

The associated panels will be illustrated on subsequent pages of this mock-up.

Tooltips will be briefly displayed whenever the user passes the mouse pointer over one of the icon buttons on the toolbar, as illustrated below.



The "Edit" menubar item will have a menu item selection associated with each of the toolbar icon buttons: Configuration, Hazard Menu and Template File. The associated panel will show up when one of the toolbar icon buttons or a functionally equivalent menu item of the "Edit" menu is selected.

CONFIGURATION UPDATE GUI DESIGN

The sample display below shows the state of the Configuration pull-down list that will appear when the user selects the "Configuration" icon button or menu item of the "Edit" menu. The application will switch to the panel associated with another edit type (described later) when the user selects the icon button or menu item associated with a different area of administration (edit/update). If the user selects an icon button or menu item of a different update type or a configuration type in the pull-down list that is not currently selected, the application will present the user with the option to save the configuration that is currently being edited if the user has not completed the current update. At that time the user will have the option to save the configuration or cancel the request altogether. The application will know the location of (path to) the files associated with configuration type as the value of an environment variable.

Whenever the user clicks on the pull-down list to select an area of configuration that the application allows updates to, the list of choices shown here will drop: WWA Site When the Configuration icon NOAA Weather Radio (NWR) button is initially selected, the Watch Outline Update (WOU) / WCN Formatting default configuration will be the WWA Site "WWA Site". There are WWA Startup User Interface Settings associated objects that will be used for this and located in this WWA Admini area that are not shown. Those objects will be illustrated and File Edit Help described later. Please Select Configuration Type: WWA Site ▼ Fyit

The first configuration panel to be described is the "Watch Outline Update (WOU) / WCN Formatting". The associated file does not seem to be mentioned in the IFPS User's Guide, WWA Configuration section. The following is a listing of the current version of the associated file, located in the development environment as

/staging/master/build/5.2.2/adapt/ifps/unv_data/wwaSiteConfig.txt, that includes a decription of the various fields in the comments.

The name of the associated field of the display on the following page has been added at the end of the last five lines that define the actual fields in parentheses.

```
#
      PURPOSE
#
#
      This is a generic environmental file which is used by the ingest wou
      executable in order to provide the environment for the ingest_wou
#
#
       application
#
# Note: To modify these variables, change only their value on the right side
#
       of the equal sign.
#
# FORMAT:
                   Turn on/off formatting of the hazard. If on, ingest_wou
                   will format based on the value of MODE, described below.
#
#
                      VALID VALUES: 0 = off
#
#
                                   1 = on
#
                   If FORMAT is on, this defines which products the
# MODE:
                   ingest_wou will format. If FORMAT is off, then
                   recommended products will be created based on
#
                   the value of MODE. Hazards can be handled in one of
                   three way: format the SLS product, format the WCN
                   product, and format both the SLS and WCN.
#
#
                      VALID VALUES: 0 = format SLS
                                   1 = format WCN
                                    2 = format both SLS and WCN
# SITE_VALID:
                   A list of the sites which you are currently responsible
#
                   for.
#
                      VALID VALUES: Any uppercase three letter site id,
#
                                    separated by pipe (|) delimitors.
#
#
# DISSEMINATE:
                   Turns on/off automatic dissemination of product to the
                   public without any user review. If off, the product
#
#
                   will be stored with the id specified in WRK_PIL. If the
#
                   FORMAT switch is off, then the product will not be
                   dissiminated to the public, even if this switch is on.
                      VALID VALUES: 0 = off
                                   1 = on
# WRK_PIL:
                   Defines the work PIL the product will be stored under
#
                   if the product is not being automatically disseminated
#
                   to the public.
#
                      VALID VALUES: Any string, up to 9 characters.
#-----
FORMAT | 1
                                      (Format)
MODE | 2
                                      (Mode)
SITES_VALID | LWX | AKQ | CTP
                                      (Result of site selection)
DISSEMINATE | 0
                                      (Disseminate to Public/Send to Text Workstation)
WRK_PIL | WRKWG1
                                      (Workstation Number)
```

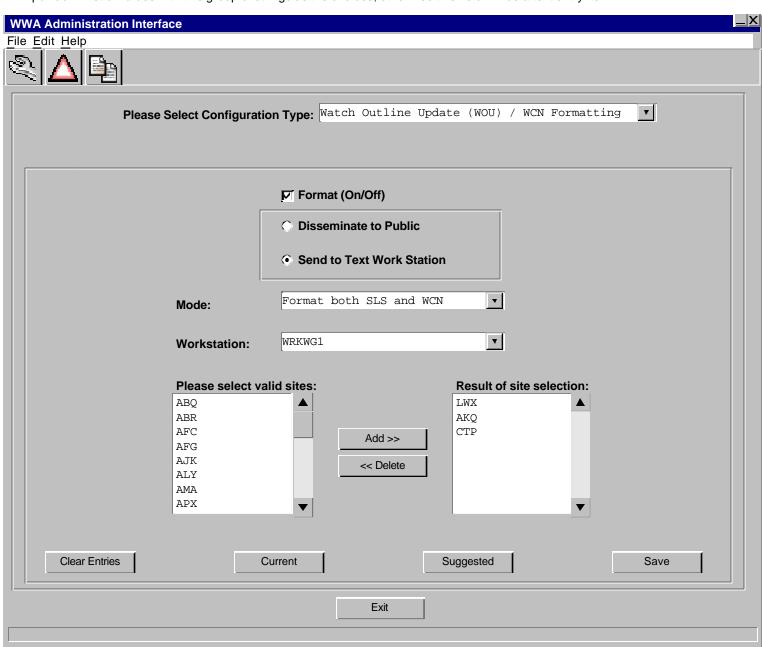
The displays are described herein from the least complicated to the most complicated. The initial values that the configuration entry fields are set to on the windows that will be described are the values that these fields are set to in the development environment versions of the associated files. The WWA Admin window will not be resizable. All of the areas of configuration that will be described in this document have associated files that are located in the staging/master/build/5.2.2/adapt/ifps/unv_data directory of the development environment, except for the "WWA Startup User Interface Settings" configuration.

Most of the panels described herein contain four buttons "Clear Entries", "Current", "Suggested" and "Save" located near the bottom. The "Clear Entries" button will have the functionality of clearing all of the entry fields. This will include setting all of the text entry fields to an empty string, clearing all radio buttons and checkboxes and setting all numeric fields to zero. The "Current" button will have the functionality of reading the current value of each of the entry fields from the associated file(s). The current value of each of the entry fields will be whatever value the field is set to in the current version of the associated file(s). The "Suggested" button will set the value of each field to the value that the field is set to in the installation version of the associated file(s). The "Save" button will save all entry field values as new values of the associated configuration file(s). The user will be asked to verify the request to save the file whenever the "Save" button is selected while this application is running.

The sample display below shows the proposed state of the configuration panel that will appear when the "Watch Outline Update (WOU) / WCN Formatting" configuration is selected in the "Select Configuration Area" combo box. The fields are set to the values that are indicated in the previous file listing.

These proposed fields will enable the user to configure the WOU. All of the entry fields depicted below are set to the associated values that they are set to in the development environment version of the associated file listed on the page before last. The panel will initialize with the values set to the values that are read in from the associated file when this area of configuration is selected. Note that the order of the sites in the "Result of site selection" list is that in which they are indicated in the associated file or that the user selects the sites in, not in alphabetical order as they are indicated in the "Please select valid sites" list. When the user selects a value (or more) from the "Please select valid sites" list on the left then selects the "Add >>" button, the value(s) will be removed from the "Please select valid sites" list box on the left, then immediately apppear in the "Result of site selection" list box on the right. When the user selects a value (or more) on the right, then selects the "Delete <<" button, the value(s) will be removed from the list box on the right, then immediately appear in the one on the left. Advanced user functionality: one item at a time in either of the list boxes below will be able to be moved to the other by double-clicking on the item.

The "Workstation Number" field is always a group of strings of the form "WRKWGx", where x is a number from 1 to n for a given workstation. The value of n should be able to be determined from the /etc/hosts. If this is so, the "Workstation Number" field will be a pull down list of values with this group of strings as the choices, otherwise this field will be a text entry item.

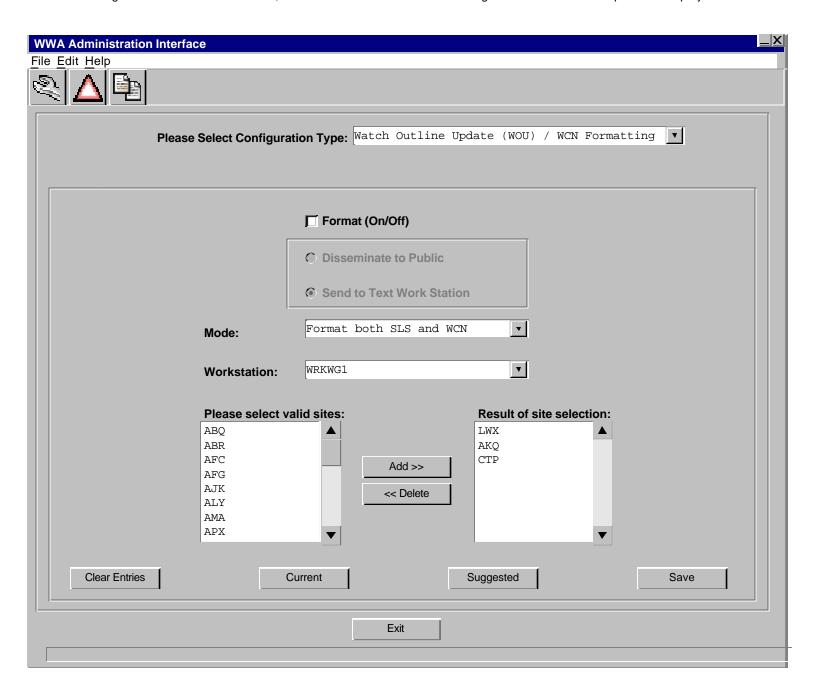


Proposed pull-down values of Mode:

Format SLS Format WCN

Format both SLS and WCN

This is the state that the WOU configuration display will be in when the "Format" check button is unchecked. When this is the case, the "Dissiminate to Public" and "Send to Text Workstation" radio buttons become disabled with the "Send to Text Workstation" button in the selected state (even if the "Dissiminate to Public" radio button was selected just prior to this action). When the "Format" check button is changed back to the checked state, these buttons will become enabled again as illustated on the previous display.



The "WWA Startup User Interface Settings" configuration will be described next. The changes made to the associated panels will be saved as fields of what is known as the Xdefaults file. The associated GUI entry fields will be distributed between two tabbed pages named "Flag Entries" and "Other Miscellaneous Entries".

The Xdefaults file is described in the IFPS User's Guide, WWA Customization section located on the Internet at URL http://isI715.nws.noaa.gov/tdl/icwf/user_guide/custom/wwa_custom.htm as follows (corresponding GUI entry field labels have been inserted at the end of the associated line of the listing in parentheses):

Xdefaults file

The following settings are located in /awips/adapt/ifps/Xdefaults/Wwa_ccc, where ccc is your site id. The fields in this file control the appearance and behavior of the WWA interface. Some of these settings are discussed below. The remaining settings relate to colors and fonts used by the WWA interface. If any of the settings are changed, the WWA client must be restarted. The format of the file is:

Variable: Setting

Make sure there is no white space after the setting.

```
Example:
```

```
wwa.showProdExp:
                                                 (Show Product Expiration; "Flag Entries" Tab)
                        True
                                                 (Show Topography; "Flag Entries" Tab)
wwa.showTopo:
                           False
                                                 (Show UGCs; "Flag Entries" Tab)
wwa.showUGCs:
                         True
wwa.showNames:
                        True
                                                 (Show Zone Names; "Flag Entries" Tab)
wwa.zoneBrdrFilename:
                        brdrpts_wwa_zlist(Zone Borderpoints File; "Other Misc..." Tab)
wwa.cntyBrdrFilename:
                        brdrpts_wwa_clist(County Border Points File; "Other Misc..." Tab)
                         20
                                         (Top Zoom Percentage; "Other Misc..." Tab)
wwa.topZoomPct:
wwa.bottomZoomPct:
                                                 (Bottom Zoom Percentage; "Other Misc..." Tab)
                                                 (Left Zoom Percentage; "Other Misc..." Tab)
wwa.leftZoomPct:
                          2.0
                         20
                                          (Right Zoom Percentage; "Other Misc..." Tab)
wwwa.rightZoomPct:
wwa.topoLow:
                        3000
                                                 (Low Topology Elevation; "Other Misc..." Tab)
wwa.topoHigh:
                        5000
                                                 (High Topology Elevation; "Other Misc..." Tab)
*.monitorShortFuseWarningsToggleB.set:
                                        True
                                                 (Monitor Long Fused Warnings; "Flag Entries" Tab)
*.monitorShortFuseWatchesToggleB.set:
                                                 (Monitor Long Fused Watches; "Flag Entries" Tab)
                                        True
*.monitorLongFuseWarningsToggleB.set:
                                        True
                                                 (Monitor Short Fused Warnings; "Flag Entries" Tab)
                                                 (Monitor Long Fused Watches; "Flag Entries" Tab)
*.monitorLongFuseWatchesToggleB.set:
                                        True
*.monitorShortTermFcstToggleB.set:
                                        True
                                                 (Monitor Short Term Forecast; "Flag Entries" Tab)
*.monitorOtherStatementsToggleB.set:
                                                 (Monitor Other Statements; "Flag Entries" Tab)
                                        True
```

wwwa.showProdExp defines whether the Product Expiration field, which is a selectable widget within
the WWA Composer, is displayed (True) or hidden (False).

wwa.showTopo, wwa.showUGCs and wwa.showNames determines if the topography, UGCs, and Zone names
are displayed on the WWA Geo Viewer automatically upon startup. If set to True they start in the
on position, and as False they are unselected.

wwa.zoneBrdrFilename and wwa.cntyBrdrFilename defines which files WWA will use as the border
points file. This file should exist in /awips/adapt/ifps/data directory. If it does not exist you
will have problems with the map display in the WWA Geo Viewer. (Note: the filename in the data
directory will end in .ccc, where ccc is you site id.)

The four ZoomPct variables shown above will determine how close the the viewer scales in when you select the "Zoom In" option in the WWA Geo Viewer. The numbers are in percent e.g. wwa.topZoomPct of 25 means set the new CWA's top 25% down from the Zoomed out map. The limits range from 0 to 45. The wwa.topZoomPct + wwa.bottomZoomPct cannot be greater than 90% and likewise for left+right.

wwa.topoLow and wwa.topoHigh specifies the elevations which the low and high topography symbols appear on the map when the Topography option is selected in the WWA Geoviewer.

Xdefaults file (continued)

- *.monitorShortFuseWarningsToggleB.set, *.monitorShortFuseWatchesToggleB.set
- *.monitorLongFuseWarningsToggleB.set, *.monitorLongFuseWatchesToggleB.set
- *.monitorShortTermFcstToggleB.set, and *.monitorOtherStatementsToggleB.set can be set to true or false. When true, the radio button described by the variable is turned on by default and products matching that description are displayed in the WWA Monitor. If False, the radio button is deselected upon startup, and products matching the description in the variable name are hidden from view.

All of the fields of the Xdefaults file will not be configurable using the GUI at this point. Those that are not being included are used to change the colors and fonts. Some of the GUI entry fields included in the following two pages are not described in the above excerpt from the website, and are described here. The following were added since development of the website document.

wwa.showToneOptionMenudefines whether the Tone Alerts menu, which is a selectable widget within the WWA Composer, is displayed (True) or hidden (False).

wwa.shiftOutlines defines whether to display the outlines of the WWA product in the Geoviewer shifted (True) or not (False).

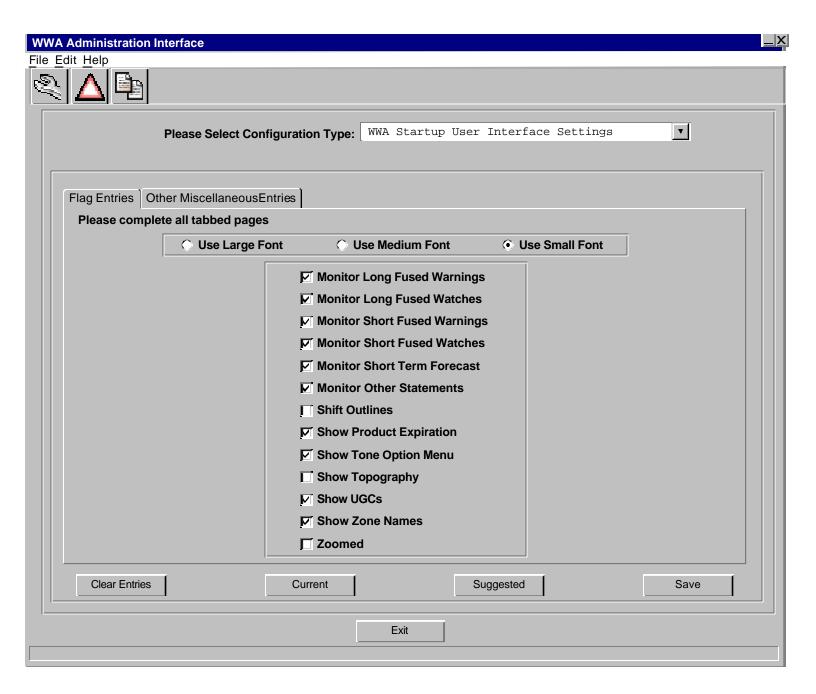
wwa.zoneMode defines what type of map will be shown on startup of the WWA application. Valid values are: 0 = Zone, 1 = County and 2 = Fire.

wwa.zoom defines whether the WWA Geoviewer is zoomed in on startup (True) or not (False).

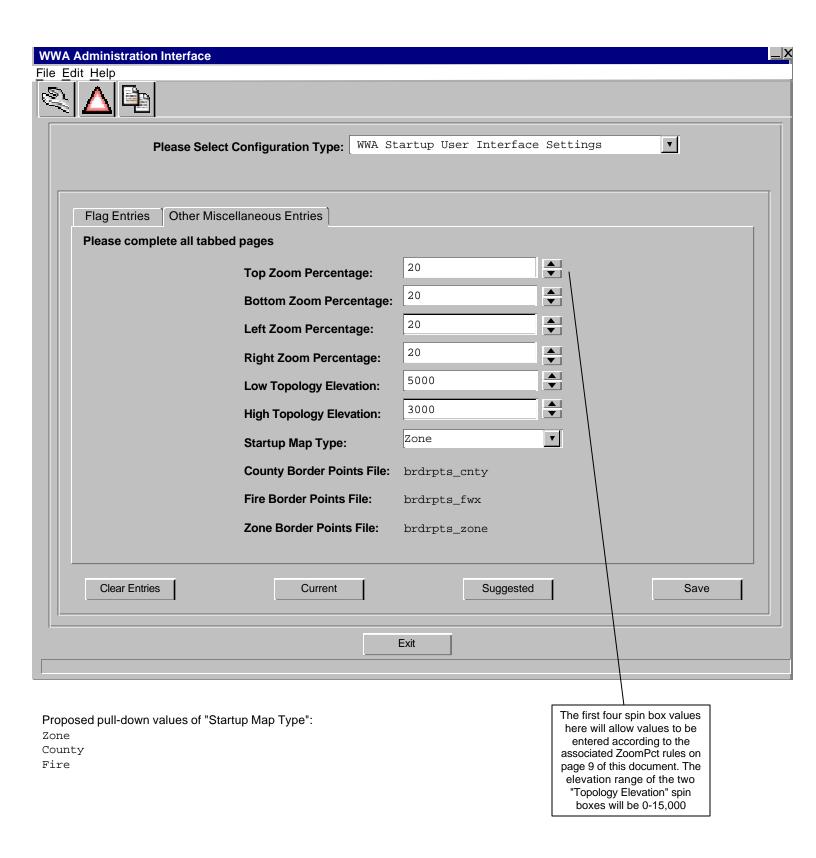
*.geoSmallFontRadioB.set, *.geoMediumFontRadioB.set, and *.geoLargeFontRadioB.set define the size of the map background font. These are boolean variables only one of which may be set to True at a time.

The sample display below shows the proposed state of the configuration panel when the WWA Startup User Interface Settings configuration is selected in the "Please Select Configuration Type" pull down list. The sample display below illustrates the "Flag Entries" tabbed page of this display. The next sample display shows the other proposed tabbed page of this display that will be named "Other Miscellaneous Entries".

All of the proposed fields on this page and the next two pages will enable the user to configure the startupsettings of the WWA user interface. Once the user has chosen this type of configuration, set all of these fields as necessary and selected the "Save" button, the associated file will be saved with the fields set according to the selections made on the two tabbed pages.



This is the "Other Miscellaneous Entries" tabbed page. Maximum zoom percentage values should be able to be calculated from the zoom percentage value that it will be compared to as indicated in the field descriptions noted earlier. No <u>user entry</u> error is possible for any of the fields these two tabbed pages, since user selects an object on the display to set the value.



The next panel to be described is the "WWA Site" configuration. The following is a listing of the development environment version of the associated file located at /staging/master/build/5.2.2/adapt/ifps/unv_data/wwaSiteConfig.txt that includes a description of the fields that will be configured by the WWA Admin application.

The next display includes three tabbed pages that are illustrated after the following listing. The name of the tabbed pages are "Flag Entries", "Segment Order Entries" and "Other Miscellaneous Entries". The name of the associated GUI fields illustrated on the three pages following this listing has been added in parentheses at the end of each line that defines a field (see the end of the third page of the following listing). The name of the associated tabbed page of the display is included in the parantheses also. The SEGMENT_ORDER field does not have this description in parentheses because there is no room. The SEGMENT_ORDER field is defined by the "Result of Segment Order selection" field on the "Segment Order Entries" tabbed page of the display.

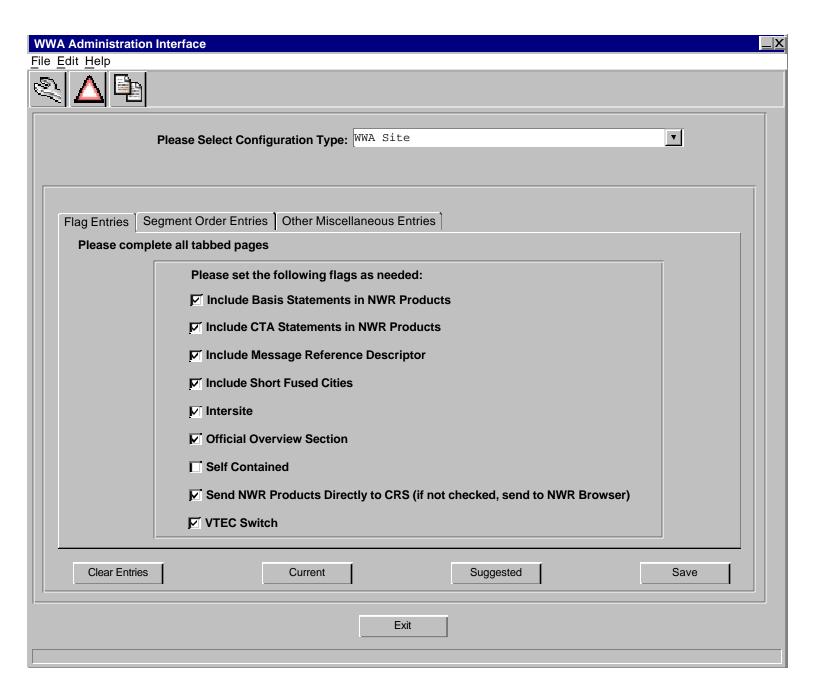
```
#
      wwa-main.env -- Common environmental file for running WWA applications
#
#
#
      This is a generic environmental file which is used by the ifps main
#
      environmental files in order to provide the environment for the WWA
       applications
#
# Note: To modify these variables, change only their value on the right side
#
       of the equal sign.
#
# VTEC:
                       Turns on/off formatting the Valid Time Event Code (VTEC)
                       string in WWA products. If VTEC is 1 only hazards where
#
#
                       the vtec_phenom and vtec_sig columns in the
#
                       characteristics table of the wwa_ccc database are filled
                       in get the VTEC string formatted in the product.
#
#
                       VALID VALUES: 0 = off
#
                                     1 = on
#
# SEGMENT_ORDER_SWITCH: Switch that controls whether the segments are order based
#
                       on the SEGMENT_ORDER field below; the order in which the
#
                       forecaster selected the hazards; or comparing the forecaster
#
                       order with the SEGMENT_ORDER below and allowing them to
#
                       choose which order to use.
#
                       VALID VALUES: 0 = Use forecaster's order
                                     1 = Use order specified in SEGMENT_ORDER
                                     2 = Compare forecaster's order with SEGMENT_ORDER
#
                                         Popping up dialog asking forecaster to choose.
# SEGMENT_ORDER:
                       Controls order in which the segments are formatted in the final
#
                       product. The final line must contain all six stings below separated
#
                       by |.
#
                       VALID VALUES: CancelledPart - Any cancelled segment
#
                                     ClearedPart - Any cleared segment
#
                                     WarningPart - Any warning segment
                                     AdvisoryPart - Any advisory segment
#
#
                                     WatchPart - Any watch segment
#
                                     NonPerilPart - Any non-peril segment
#
 WWA_CRS_HOT:
                       Turns on/off sending NWR WWAs directly to
                       the CRS (if set to 0 then the product is stored
#
                       in $FXA_DATA/workFiles/nwr/pending).
#
                       VALID VALUES: 0 = off
#
                                     1 = on
#
                       Turns on/off the pushing/receiving of WWAs
 WWA INTERSITE:
                       to/from adjacent offices.
#
#
                       VALID VALUES: 0 = off
#
                                     1 = on
```

```
# WWA_POVER_OFFICIAL:
                      Controls formatting of the overview section in the
#
                      official WWA products.
#
                      VALID VALUES: 0 = off (CTA and BASIS statements are
#
                                        formatted with the segments, no
#
                                        overview section is formatted in the
                                        official product).
                                    1 = on (Common CTA and BASIS statements
                                        are formatted in the overview section
                                        of the official product).
#-----
# Note: To modify these variables, change only their value on the right side
#
       of the equal sign.
#
#
# CANCEL_OFFSET_TIME:
                      The number of minutes canceled NWR individual products
#
                      will be broadcast after the product expiration time.
#
                      VALID VALUES: Any positive number
# WWA_NWR_TWRS:
                      Geo_list name for the towers/ugcs association
#
                       specific to wwa nwr products. used by the wwa
#
                      statement server and the wwa_nwr program. The
#
                      wwa_nwr program passes this value as command
#
                      line argument to mk_brt program.
#
# WWA_POVER:
                      Controls formatting of the overview section in the
#
                      NWR WWA products
#
                      VALID VALUES: 0 = off
#
                                    1 = on (format overview in each NWR
#
                                        product - i.e.overview will be
#
                                        repeated in each product corresponding
#
                                        to the different hazards in a
#
                                        segmented product)
#
                                    2 = on (format overview in a separate NWR
#
                                        overview product, CCCOVRNNN that
#
                                        is read on the NWR)
# INC_SF_CITY:
                      Controls formatting of city names in short fuse NWR WWA
#
                      products. Value is used by the perl scripts that does
#
                      the reformatting of the official product into the NWR
#
                      product.
#
                      VALID VALUES: 0 = off
#
                                    1 = on
# WWA_NWR_SCRIPT:
                      Name of the script that does the reformatting of the
#
                      official short fuse product into the NWR product.
# WWA_INC_BASIS:
                      Controls formatting on Basis statements in NWR WWA
#
                      individual products.
#
                      VALID VALUES: 0 = off
#
                                    1 = on
# WWA_INC_CTA:
                      Controls formatting on CTA statements in NWR WWA
                      individual products.
#
                      VALID VALUES: 0 = off
#
# WWA CTA DELIM:
                      Token used to delimit start of CTA's in official WWA
#
                      product.
#
```

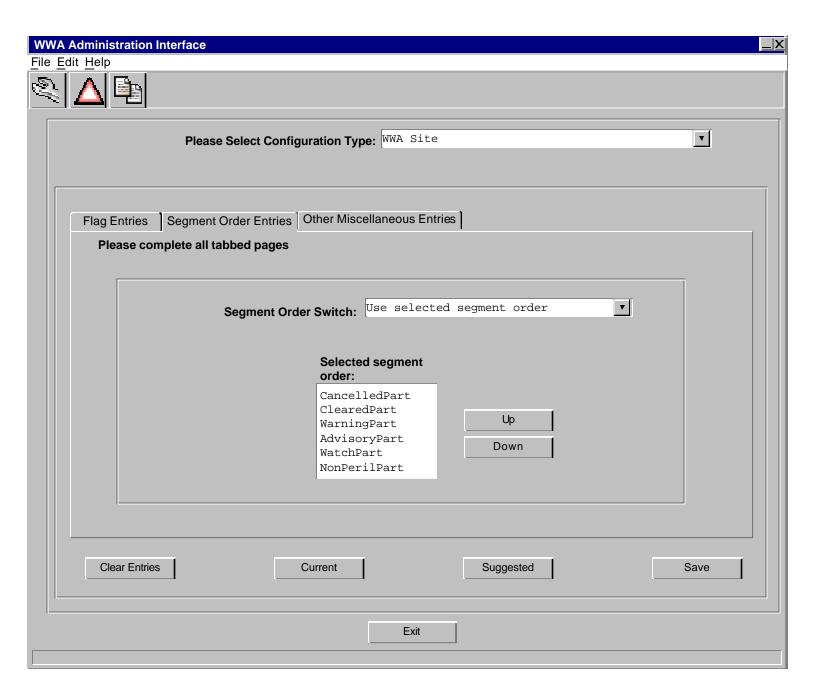
```
# SEC_LIST_FORM:
                    Determines the way geography is formatted in NWR WWA
#
                    individual short-fuse products.
#
                    VALID VALUES: not set = Program determines the format
#
                                            based on the existence of duplicate
#
                                            counties with the same name (default
#
                                            is 1 below, 2 if the condition above
                                            is meet).
                                  1 = List all the states together then
                                     list all the counties together.
                                  2 = List a state and associated counties
# WWA_INC_MRD:
                       Controls formatting the Message Reference Descriptor
                       directive in file name and CRS header of CRS bound
#
                       messages for all products (global).
#
                       VALID VALUES: 0 = off, 1 = on
# USE_CANCEL_OFFSET_TIME:Controls how long a indivdual canceled NWR WWA message
                       will be broadcast. If this value is set to 1, the
#
                        indivdual canceled NWR WWA message will be broadcast
#
                        for at least CANCEL_OFFSET_TIME minutes. If set to 0,
                        the indivdual canceled NWR WWA message will be
                        broadcast until the product purge time.
                        CANCEL_OFFSET_TIME is described above.
                        VALID VALUES: 0 = off (DEFAULT)
                                     1 = on
# SELFCONTAINED: New field that is not included in the current devlopment version of the file. This
                field is described in the Self-Contained Watch, Warning, Advisory Model document
                authored by Mark McInerney.
#-----
SELFCONTAINED 0
                                        (Self Contained; "Flag Entries" Tab)
VTEC | 1
                                        (VTEC Switch; "Flag Entries" Tab)
SEGMENT_ORDER_SWITCH | 1
                                        (Segment Order Switch; "Segment Order Entries" Tab)
SEGMENT_ORDER | CancelledPart | ClearedPart | WarningPart | AdvisoryPart | WatchPart | NonPerilPart
WWA CRS HOT 1
                                        (Send NWR Products Directly to CRS; "Flag Entries" Tab)
WWA_INTERSITE | 1
                                         (Intersite; "Flag Entries" Tab)
WWA_POVER_OFFICIAL | 1
                                 (Official Overview Section; "Flag Entries" Tab)
CANCEL_OFFSET_TIME | 15
                                         (Cancel Offset Time; "Other Miscellaneous Entries" Tab)
WWA NWR TWRS nwr twrs
                                         (NWR Towers; "Other Miscellaneous Entries" Tab)
                                         (NWR Overview Section; "Other Miscellaneous Entries" Tab)
WWA_POVER 2
INC_SF_CITY | 1
                                         (Include Short Fused Cities; "Flag Entries" Tab)
WWA_NWR_SCRIPT|wwa_nwr_short_fuse.pl
                                         (NWR Script; "Other Miscellaneous Entries" Tab)
WWA_INC_BASIS | 1
                                         (Include Basis Statements; "Flag Entries" Tab)
                                         (Include CTA Statements; "Flag Entries" Tab)
WWA_INC_CTA | 1
WWA_CTA_DELIM | %C
                                         (CTA Delimeter; "Other Miscellaneous Entries" Tab)
SEC_LIST_FORM
                                        (NWR Short Fused Geography Code; Misc Tab)
                                        (Include Message Reference; "Flag Entries" Tab)
WWA_INC_MRD | 1
USE_CANCEL_OFFSET_TIME | 1
                                        (Use Cancel Offset Time; "Other Miscellaneous Entries" Tab)
```

The sample display below shows the proposed state of the configuration panel when the WWA Site configuration is selected in the "Please Select Configuration Type" pull down list. The sample display below illustrates the "Flag Entries" tabbed page of this display. The next two sample displays show the other two proposed tabbed pages of this display that will be named "Segment Order Entries" and "Other Miscellaneous Entries".

All of the proposed fields on this page and the next two pages will enable the user to configure WWA Site. Once the user has chosen this type of configuration, set all of these fields as necessary and selected the "Save" button, the associated file will be saved with the fields set according to the selections made on the three tabbed pages.



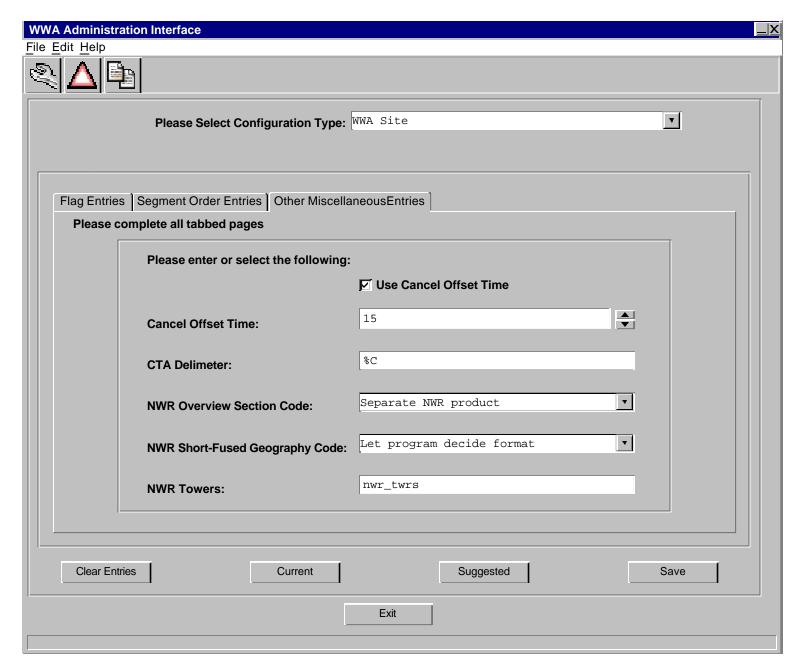
The sample display below shows the proposed "Segment Order Entries" tabbed page of the WWA Site configuration entry page. The segment order selections will be reordered by selecting one item in the list at a time after which the "Up" or "Down" buttons will need to be selected to move the item up or down in the list, respectively.



Proposed pull-down values of Short-Fused Geography Code:

Use forecater's order
Use selected segment order
Let forecaster choose in dialog

This is the "Other Miscellaneous Entries" tabbed page. Need to know the valid range for the "Cancel Offset Time" and valid entry values of the "CTA Delimeter" and "NWR Towers" entry fields before error situations can be determined for this tabbed page. The text entry field named "NWR Script" was removed from this panel as a result of comments from the first design review. No <u>user entry</u> error is possible for any of the fields on the other two tabbed pages associated with the wwaSiteConfig.txt file, since user selects an object on the display to set the value.



Proposed pull-down values of Overview Section Code:

Off Format in each NWR Separate NWR product Proposed pull-down values of Short-Fused Geography Code:

Let program decide format
All states, then all counties
All states and counties together

The NOAA Weather Radio configuration will be described next. The changes made to the associated panels will be saved as fields of the nwr_summary_suites.txt and nwr_summary_intro stmt.txt files.

The nwr_summary_suites.txt file is described on the last page of the IFPS User's Guide, WWA Customization section located on the Internet at URL

http://isl715.nws.noaa.gov/tdl/icwf/user_guide/custom/wwa_custom.htm as follows:

NWR Summary Suite definition file

The following settings are in /awips/adapt/ifps/data/nwr_summary_suites.txt. This is a single ASCII flat file that defines the summary suites for the wwa_nwr program. This file is composed of an indefinite number of lines. Each line contains 3 fields separated by a white space and terminated with a new line. The first field is the summary suite name. Currently only one summary suite name may be used and should be repeated as the name for each suite. The second field is a comma separated list of EAS or AFOS pil catagory ids. Each EAS or AFOS pil catagory id may be post fixed with a "+" character to indicate that this id is a hazard trigger. A hazard trigger may exist in only one suite but a non triggered hazard may be in more than one suite. Every suite must have at least one hazard trigger. The third field is the summary suite threshold. Avoid syntax errors when editing the summary suite flat file. Three fields are required and their order is important. Only one white space is permitted between fields. Only one comma is permitted between items in the second field. Don't terminate the second field with a comma. Use only "A-Z", ",", and "+" characters in second field. The third field must be an integer (no non digit chars). No blank lines (consecutive new lines) are permitted.

Example:

```
SUM FFW+,FLW,SVR+,TOR+ 3
SUM FLA+,FFA,SVA+,TOA+ 3
SUM HWW+,BZW+,WSW+,NPW+ 3
SUM PNS+,NOW+ 3
```

The following is a description of the WWA Summary Product that is part of the IFPS User's Guide, Technical section on the Internet at http://isI715.nws.noaa.gov/tdl/icwf/user_guide/tech/wwa_tech.htm

WWA Summary Product

The WWA_Summary product is run on the concept of summary suites, which is a similar concept to the CRS broadcast suites, and relays information concerning the WHAT, WHEN, and WHERE of each hazard. In the table below there are examples of possible summary suites. The first column refers to the name of the product. The second column refers to hazard identifiers, which define hazards such as a tornado warning (TOR) and the order in which these hazards are listed is the order in which they will appear in the summary product. The "+" character indicates the hazard is a trigger, which is similar to a trigger in the CRS setup tables. Numbers in the thirdcolumn are representative of the number of hazards in the specific summary suite that must be issued at one time for a summary product to be produced. There is a hierarchical order in the summary suites so that only the summary suite with the highest priority is broadcast. Two files responsible for producing the summary product are "nwr_summary_intro_stmt.txt" and "nwr_summary_suites.txt". Both of these summary files are configurable and locate in /awips/adapt/ifps/data.

```
Table 1 Three unique summary suites SUM TOR+,SRV+,FFW+,FLW+ 3 SUM TOA+,SVA+,FFA+,FLA+ 4 SUM BZW+, WSW,NPW+,HWW+ 2
```

The nwr_summary_intro stmt.txt file is described on the last page of the IFPS User's Guide, WWA Customization section located on the Internet at URL

http://isl715.nws.noaa.gov/tdl/icwf/user_guide/custom/wwa_custom.htm as follows:

NWR Introductory Statement definition file

The following settings are in /awips/adapt/ifps/data/nwr_summary_intro_stmt.txt. This is a single ASCII flat file that defines the introductory statement that precedes each NWR summary WWA message. It can only be one line of indefinite length and may include only one meta character "@". The meta character is used to locate a phrase within the introductory statement that indicates the types of hazards summarized. For example if there are two watches and two warning in the summary WWA message, then the "@" will be expanded into "WATCHES AND WARNINGS ARE"

Example:

THE FOLLOWING @ CURRENTLY IN EFFECT.

The associated file is stored in the development environment as /staging/master/build/5.2.2/adapt/ifps/unv_data/nwr_summary_intro_stmt.txt.

The "Summary Introductory Statement" field of the panel shown on the next page will be saved to the nwr_summary_intro stmt.txt and all other fields of the group will be used to build the nwr_summary_suites.txt file. The initial value of this entry field is the string value "THE FOLLOWING @ CURRENTLY IN EFFECT" that the field is set to in the development environment version of this file. This string is also used as the example string value in the above description of the file from the IFPS User's Guide, WWA Customization section. The user has the option of changing the string value to a new string that contains an ampersand "@" character. The entered string will be changed to all capital letters.

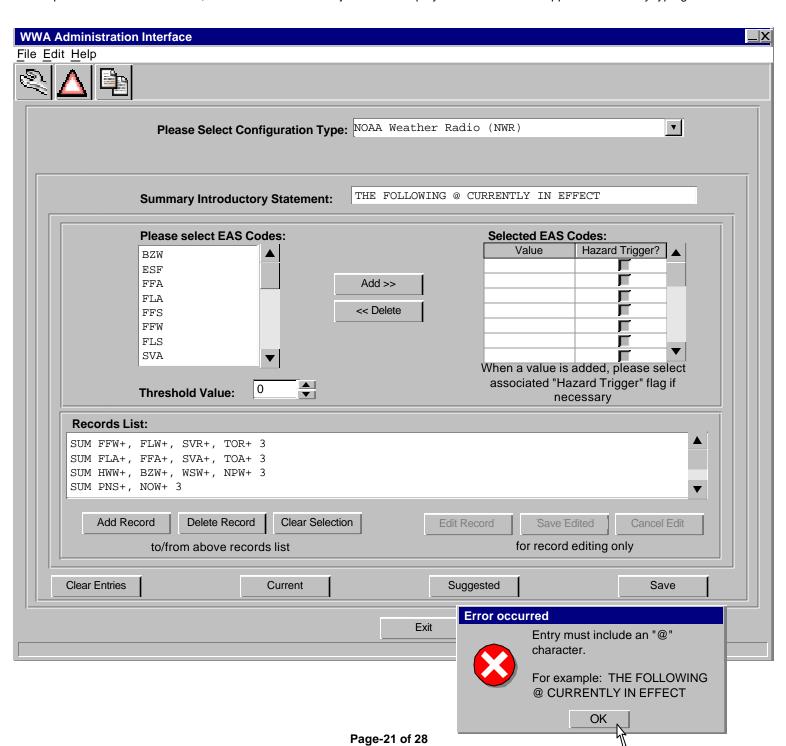
If the user overlooks inclusion of an "@" character in the "Summary Introductory Statement" field, then neither the nwr_summary_intro_stmt.txt file nor the nwr_summary_suites.txt file will be saved and the error dialog at the bottom right of the next page will be generated (in the center of the screen). The error dialog will serve the purpose of informing the user of the error and will remain displayed until the user acknowledges the error by selecting the "OK" button of that error dialog.

The sample display below shows the proposed state of the configuration file panel when the "NOAA Weather Radio (NWR)" configuration is selected in the "Select Configuration Type" pull-down list. A listing of the lines that the user has generated to be added to the file or that have been read from the file (Records List) is included in the display because the nwr_summary_suites.txt file has a repeating set of fields in each line. This is a different situation than the previously described files, wherein each line of the file is a distict field.

When the panel is initialized, any records that are stored in the nwr_summary_suites.txt file will be listed in the Records List. No record will be selected in the Records List and the states of the "Please select EAS Codes" and "Selected EAS Codes" lists will as illustrated below.

These proposed GUI entry fields will enable the user to configure the fields of the nwr_summary_suites.txt files. The fields of the files are described on the previous two pages. There is only one summary suite name at the time of this writing that will automatically be set by the application. That name is "SUM". Since there is only one summary suite name, the value will automatically be set by the application with no user input required.

Need to know if there is a valid range of values for the "Threshold" entry field before error situation can be determined for it. No <u>user input</u> error is possible for the other fields, since user selects an object on the display to set the value as opposed to actually typing in the value.

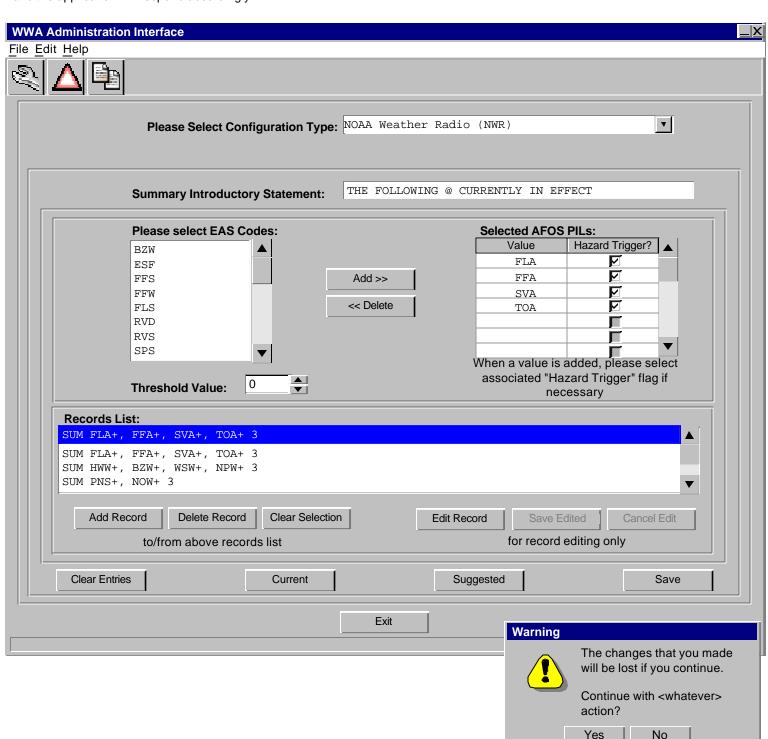


The sample display below shows the proposed state of the configuration file panel once the user selects one of the records in the Records List. The user will be able to select only one record in the "Records List" at a time. The edit functionality is described on the next page. The user will be able to select the "Clear Selection" buttons to return to the state depicted on the previous page where no record is selected in the "Records List" and the "Selected EAS Codes" list is cleared out. The "Reset" button will do this and clear the "Records List" as well.

If the hazard trigger flag has been selected in association with one of the selected EAS codes, the hazard trigger flag will be greyed out (not activated) if the user selects the code to add to another record. Therefore, no user entry error is possible on this display.

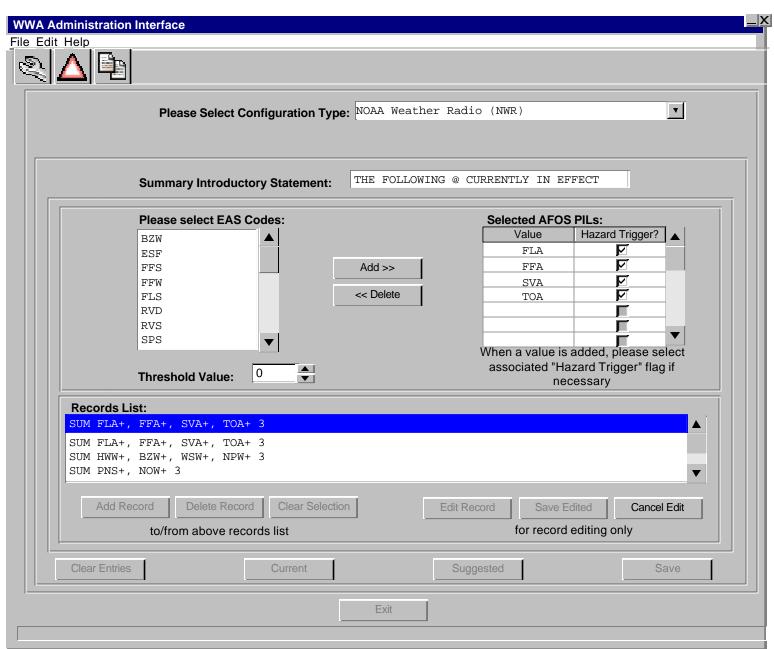
When the user adds a new record to the file by selecting the "Add Record" button, the new record will automatically be the one selected in the records list.

If the user selects the "Clear Entries", "Current" or "Suggested" button, tries to select a different file or selects one of the icon buttons after making some changes to the "Records List", the warning dialog shown in the bottom right corner will appear in the center of the window informing the user that "The changes made will be lost if you continue. Continue with <whatever> action?". At that point, the user will answer and the application will respond accordingly.



The user will build a record of the file using the objects in the group box above the records list, then use the "Add Record" button to add it to the records list. If the user needs to edit a record that is already in the list, the user will need to select that record then select the "Edit Record" button. Any changes that the user makes to the fields in the group box above the "Records List" will be saved to the associated fields of the selected record in the file when the user selects the "Save Edited" button. The "Cancel Edit" button will be used to cancel an editing session.

The "Cancel Edit" button will be greyed out (not activated) as shown on the previous page until the user selects the "Edit Record" button. The "Save Edited" button will be greyed out after the "Edit Record" button is selected until the user makes the first change to the entry fields. When the "Edit Record" button is selected, most of the buttons on the panel (including the "Edit Record" button), the Records List, the icon buttons and many of the menu items will be greyed out until either the "Save Edited" or "Cancel Edit" button is selected as illustrated below. When the user is finished editing the record and selects the "Save Edited" button, the changes indicated by the objects in the group box above the Records List will replace the selected record and the panel will otherwise go back to the state shown on the previous page. The new version of therecord will then be selected in the records list.



State of the panel when the "Edit Record" button is selected

The Records List and icon buttons will be greyed out when "Edit Record" button is selected also.

Just a reminder that the "Edit" menubar item will have a menu item selection associated with each of the toolbar icon buttons, Configuration, Hazard Menu and Template File. The associated update panel will show up in the working panel when one of the toolbar icon buttons or a menu item of the "Edit" menu is selected.

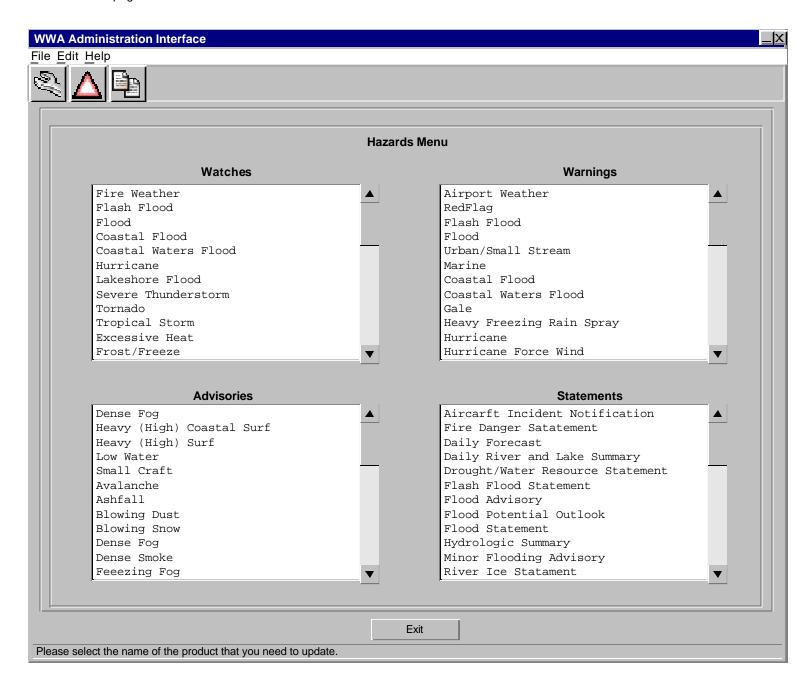
HAZARD UPDATE GUI DESIGN

The sample display on the next page shows the initial panel that will appear when the user selects the "Hazard Menu" icon button or menu item of the "Edit" menu. Remember that the application will switch to the panel associated with another update type when the user selects the icon button or menu item associated with a different update type. If the user makes a request to switch to a different type of update and the user has not completed the current update, the application will present the user with a dialog giving the user the option to save the hazard that is currently being updated. At that time the user will have the option to save the changes to the hazard or cancel the request altogether.

The sample display below shows the initial panel that will appear when the user selects the "Hazards Menu" icon button or menu item. This display is basically the same as the initial display that appears when the user runs the current Setup GUI (graphical user interface). The functionality of the WWA Admin associated with the "Hazards Menu" database selection will be the same as that of the existing WWA Setup application except that the WWA Admin application will no longer allow the user to add or delete hazards. Only editing of existing hazards will be allowed. There will also be some changes to the organization of the objects of the new window that is generated when one of the items in the list boxes below is selected.

No attempt is made herein to completely describe the functionality of the existing Setup GUI. See the URL http://http://isl715.nws.noaa.gov/tdl/icwf/user_guide/custom/wwa_custom.htm for a detailed description of that functionality. The main purpose of this document is to describe the format of the new GUI and any differences in functionality. The GUI of the WWA Admin application will contain the same objects as the Setup GUI, just organized differently

When the user is presented with the display illustrated below, they will have the option to edit an existing Watch, Warning, Advisory or Statement (WWAS) that is listed in one of the four list boxes. In order to edit an existing WWAS, the user will have to double-click the particular WWAS item listed in one of the text boxes to generate an associated Hazard window that is illustrated and described on the next page.



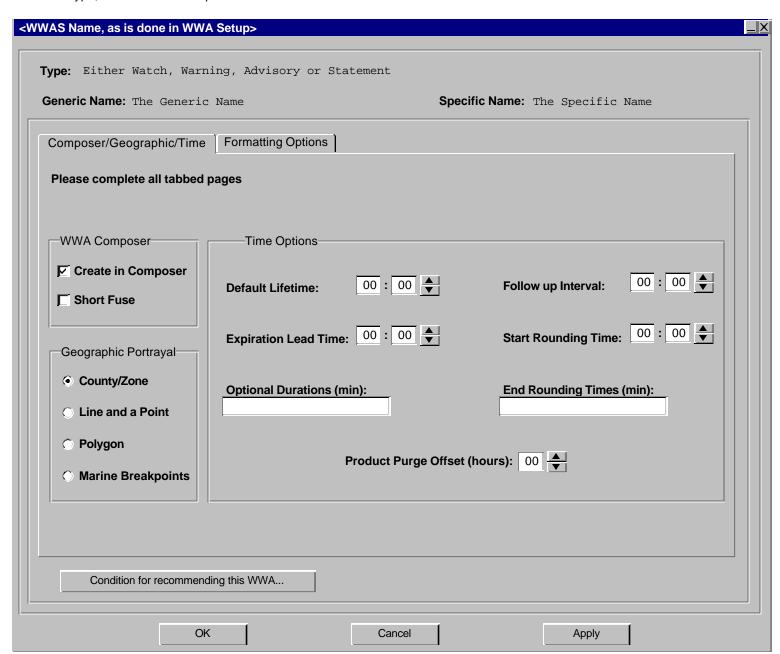
The user will be allowed to have a maximum of five hazards that are being edited at any one time. When one of the hazards is selected, a new window (illustrated below) will appear. This means that a maximum of five of these new windows will be able to be opened at any one time. If five of them are open, one will need to be closed before another will be allowed to be generated.

The sample display below shows the new window that will be generated when the user:

- -double-clicks a WWAS listed in the text boxes on the previous display or
- -selects a WWAS listed in the text boxes on the previous display then selects"Edit" from the popup menu that is generated when the user clicks the right mouse button (this popup menu may not be necessary anymore since delete and add functionality are being eliminated).

The window below will be referred to herein as the WWAS window. All of the items that are included in the WWA Setup GUI will be distributed over two tabbed panes of the WWAS window. One is illustrated below, the other on the next page. The one below includes all of the entry fields not included in the "Formatting Options" group of the WWA Setup display. Only one of the panels depicted below will be allowed to be generated at a time per hazard.

The functionality of this panel will be the same as that of the WWA Setup application except that the user will no longer be able to edit the Type, Generic Name or Specific Name.

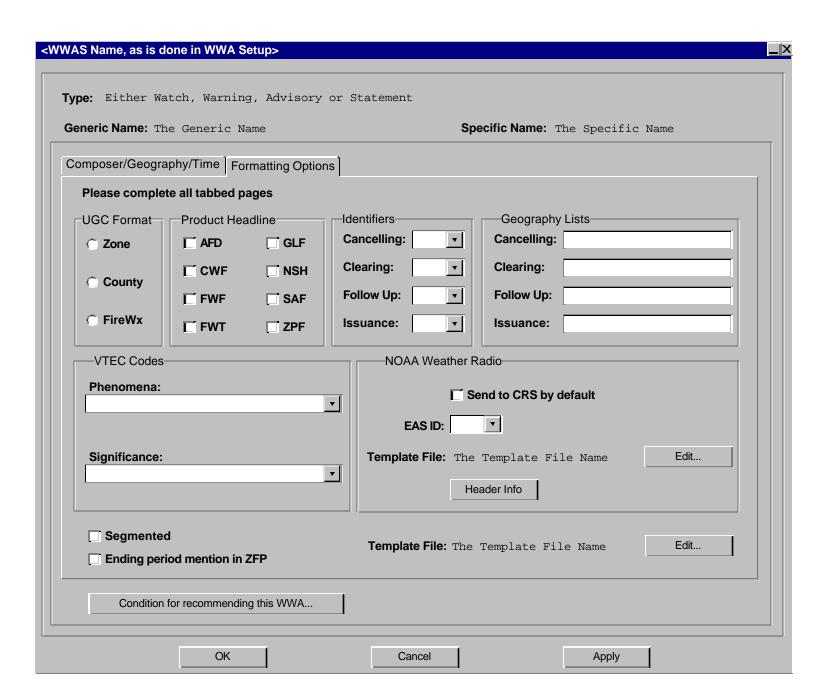


The sample display below shows the second tabbed pane of the WWAS window. This tabbed pane includes all of the entry fields that are included in the "Formatting Options" of the original WWA Setup GUI. Many of these entry fields have been changed to pull-down lists as opposed to the text entry fields representing these objects in the WWA Setup. The values of "Phenomena" and "Significance" that will now be included in the associated pull-down lists will be the values of these two VTEC elements that are listed in Appendix A of the VTEC document located on the Internet at http://www.nws.noaa.gov/om/vtec/vtec.pdf. These codes are listed on the following page. The user will no longer be able to change the Type, Generiic Name, Specific Name or Template File Name.

First, the abbreviation code, then decriptive name of each of these two fields will make up each line of these two pull-down lists separated by a few spaces. Only the abbreviated part of the name will be saved to the associated database field when the "OK" or "Apply" button is selected.

The pull-down lists associated with the "Identifiers" and "EAS ID" fields will contain the codes listed in the WWA Product Table located on the Internet at http://www.nws.noaa.gov/mdl/wwa/new_wwa_50_table_9.htm

The items in this pull-down menu will be based on the WWA Hazard Type, Generic and Specific Names of the product.



NOTE: The following issues were raised at the design review and need further investigation:

The "Identifiers" and "EAS ID" fields may not be able to be pull down lists, since new values may need to be added to the asociated lists and this type of entry field would not allow it. Mark indicated that these should be left designed as pull down lists for now.

In the existing WWA Setup application, the user can change the name of the associated template file names. The question was raised as to whether this should be allowed.

Significance Elements:

- W WARNING
- A WATCH
- Y ADVISORY
- S STATEMENT
- O OUTLOOK
- F FORECAST
- N SYNOPSIS

Phenomena:

- BZ BLIZZARD
- WS WINTER STORM
- WW WINTER WEATHER
- SN HEAVY SNOW/SNOW
- LE LAKE EFFECT SNOW
- BS BLOWING/DRIFTING SNOW
- SB SNOW AND BLOWING SNOW
- IP SLEET
- ZR FREEZING RAIN
- FZ FREEZE
- FF FREEZING FOG
- FR FROST
- WC WIND CHILL
- HW HIGH WIND
- FG FOG
- SM SMOKE
- HT HEAT
- DU BLOWING DUST
- FL FLOOD
- IJ ICE JAM FLOOD
- ER EXCESSIVE RAINFALL
- SM SNOWMELT
- RS RAINFALL AND SNOWMELT
- DM DAM OR LEVEE FAILURE
- GO GLACIAL DAMMED LK. OUTB
- SR STORM
- HF HURRICANE-FORCE MARINE
- TR TROPICAL STORM
- HU HURRICANE
- LW LAKE WIND
- LS LAKESHORE
- CF COASTAL FLOOD
- SV SEVERE THUNDERSTORM
- TO TORNADO
- FW FIRE WEATHER (RFW, FWW)
- RH RADIOLOGICAL HAZARD
- VO VOLCANO
- AV AVALANCHE
- TS TSUNAMI
- MA MARINE (SMW, MWS)
- SC SMALL CRAFT
- GL GALE
- ZP ICE ACCRETION
- LO LOW WATER